

U.S. Express Mail Label No. EL639069986US

Docket No. 042159.0119

**FOLEY & LARDNER**  
2029 Century Park East - Suite 3500  
Los Angeles, CA 90067-3021

TO: Commissioner for Patents  
Box Patent Application  
Washington D.C. 20231

**UTILITY PATENT APPLICATION TRANSMITTAL UNDER 37 C.F.R. 1.53(b)**

Transmitted herewith for filing is the patent application of:

**INVENTOR(S): Victor DEMJANENKO,  
Frederic J. HIRZEL,  
Juan Alberto TORRES**

**TITLE: USE OF TURBO-LIKE CODES FOR QAM MODULATION USING  
INDEPENDENT I AND Q DECODING TECHNIQUES AND  
APPLICATIONS TO xDSL SYSTEMS**

In connection with this application, the following are enclosed:

**APPLICATION ELEMENTS:**

- ☒ Specification (including Abstract): 63 pages  
☒ Claims: 9  
☒ Formal Drawings: 73 Sheets  
☐ Power of Attorney By Assignee and Exclusion of Inventor Under Rule 37 C.F.R. § 3.71  
☒ Declaration and Power of Attorney  
    ☒ Unsigned  
    ☐ Executed (original or copy)  
    ☐ Copy from a prior application (37 CFR 1.63(d))  
(relates to continuation/divisional boxes completed) - NOTE: Box below

**ACCOMPANYING APPLICATION PARTS:**

- ☐ Assignment with Recordation Form Cover Sheet; Check No. for \$  
Revocation and Power of Attorney  
☐ Information Disclosure Statement(IDS) with PTO-1449.  
    ☐ Copies of IDS Citations  
☒ Computer Program Listing Appendix (pages 1-95)  
☒ Check No. 14520 in the amount of \$355.00 for the filing fee.  
☒ Certificate of Mailing By Express Mail  
☒ Return Receipt Postcard (MPEP 503)  
☒ Small Entity Statement: Applicants claim small entity status pursuant to 37 C.F.R. § 1.27.  
☐ Certified Copy of Priority Document(s) with Claim of Priority (if foreign priority is claimed).

**CONTINUING APPLICATION**, check appropriate box and supply the requisite information:

- ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application Serial No. \_\_\_\_  
☐ Amend the specification by inserting before the first line the following sentence: --This application is a continuation, ☐ divisional or ☐ continuation-in-part of application Serial No. \_\_, filed \_\_--

**CORRESPONDENCE ADDRESS:**

Please address all future correspondence to:

David A. Blumenthal at the Foley & Lardner address noted above.

Telephone: (310) 277-2223

Fax Number: (310) 557-8475

**FEE CALCULATIONS:** (Small entity fees indicated in parentheses.)

(1) For	(2) Number Filed	(3) Number Extra	(4) Rate	(5) Basic Fee \$710. (\$355.)
Total Claims	9 - 20 = 0	0	X \$18 (x \$9)	0.
Independent Claims	3 - 3 = 0	0	X \$80 (x \$40)	0.
Multiple Dependent Claims: 0			\$270 (\$135)	0.
Assignment Recording Fee per property			\$40	0.
Surcharge Under 37 C.F.R. 1.16(e)			\$130 (\$65)	0.
			<b>TOTAL FEE:</b>	<b>\$355.</b>

**METHOD OF PAYMENT:**

Check No. 14520 in the amount of \$355.00 for the total fee is enclosed. **Applicants claim small entity status pursuant to 37 C.F.R. § 1.27.** Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0872. A duplicate of this transmittal is attached.

Respectfully submitted,

April 30, 2001

Date



Ronald Coslick

Reg. No. 36,489

U.S. Express Mail Label No. EL639069986US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Attorney Docket No. 042159.0119

Victor DEMJANENKO,  
Frederic J. HIRZEL,  
Juan Alberto TORRES

Group Art Unit: Unassigned

Examiner: Unassigned

Filed: Concurrently herewith

Serial No.: Unassigned

For: USE OF TURBO-LIKE CODES FOR QAM MODULATION USING INDEPENDENT I AND Q  
DECODING TECHNIQUES AND APPLICATIONS TO xDSL SYSTEMS

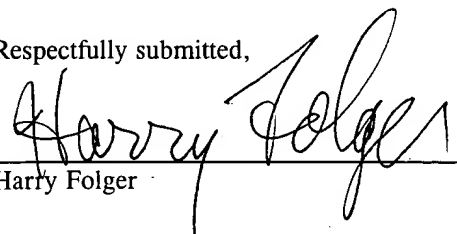
**CERTIFICATE OF MAILING BY U.S. EXPRESS MAIL**

Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

I hereby certify that the following paper(s) and/or fee(s) along with any attachments referred to or identified as being attached or enclosed are being deposited with the United States Postal Service as Express Mail (**U.S. Express Mail Label No. EL639069986US**) under 37 C.F.R. § 1.10 on the date of deposit shown below with sufficient postage and in an envelope addressed to: Commissioner for Patents, Box Patent Application, Washington D.C. 20231.

1. Utility Application Transmittal Under 37 C.F.R. 1.53(b)
2. Specification, Claims, and Abstract: 63 pages
3. Formal Drawings: 73 sheets
4. Declaration and Power of Attorney (unsigned)
5. Computer Program Listing Appendix (pages 1-95)
6. Check No. 14520 in the amount of \$355.00 for the filing fee
7. Return Receipt Postcard

Respectfully submitted,

  
Harry Folger

April 30, 2001  
Date

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